National Board of Examinations

Question Paper Name :	DNB Physiology Paper3
Subject Name :	DNB Physiology Paper3
Creation Date :	2024-10-19 17:56:17
Duration :	180
Total Marks :	100
Display Marks:	No
Share Answer Key With Delivery Engine :	No
Actual Answer Key :	No

DNB Physiology Paper3

Group Number :	1
Group Id :	3271872883
Group Maximum Duration :	0
Group Minimum Duration :	180
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	100

DNB Physiology Paper3

Section Id :	3271872886
Section Number :	1
Section type :	Offline
Mandatory or Optional :	Mandatory
Number of Questions :	10
Number of Questions to be attempted :	10
Section Marks :	100
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	3271872890
Question Shuffling Allowed :	No

Question Number : 1 Question Id : 32718730114 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

Please write your answers in the answer booklet within the allotted pages as follows:-

Question Number	Answer to be attempted within	Question Number	Answer to be attempted within
Q. 1	Page 1-5	Q. 6	Page 26-30
Q. 2	Page 6-10	Q. 7	Page 31-35
Q. 3	Page 11-15	Q. 8	Page 36-40
Q. 4	Page 16-20	Q. 9	Page 41-45
Q. 5	Page 21-25	Q. 10	Page 46-50

1. Describe the structure, function and effect of γ-motor neuron discharge on muscle spindle. [10]

Question Number : 2 Question Id : 32718730115 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

a) Describe the neuronal circuit of basal ganglia. [5]
b) Role of basal ganglia in planning and executing motor movements. [5]

Question Number : 3 Question Id : 32718730116 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

a) Describe in detail the functions of Organ of Corti. [6]
b) Microcochlear potential. [4]

Question Number : 4 Question Id : 32718730117 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

Compare and contrast:
a) Length tension relationship of skeletal muscle and smooth muscle. [5]
b) Effect of epinephrine and norepinephrine. [5]

Question Number : 5 Question Id : 32718730118 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

Describe the role of hypothalamus and pituitary gland in the regulation of ovarian functions and its role of feedback loops in this process. [10]

Question Number : 6 Question Id : 32718730119 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

a) Explain iodide trapping mechanism. [3]
b) Describe the physiological functions of thyroid hormone. [5]
c) What is Wolff-Chaikoff effect? [2]

Question Number : 7 Question Id : 32718730120 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

Describe the role of:
a) Vitamin D in immunity. [3]
b) Parathyroid hormone in maintaining bone strength. [4]
c) Calcitonin on calcium metabolism. [3]

Question Number : 8 Question Id : 32718730121 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

a) Role of neurotransmitters in depression. [5]
b) Role of serotonin in endogenous analgesia. [5]

Question Number : 9 Question Id : 32718730122 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

a) Human chorionic somatomammotropin. [3]
b) Functions of oxytocin. [4]
c) Behavior development of the infant during first year of life. [3]

Question Number : 10 Question Id : 32718730123 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

a) Clinical utility of brainstem auditory evoked potential. [5]
b) Olfactory sensory pathway. [5]